

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. GNE.2930R1C4	APPLICATION NO. 10/033,398
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Botstein et al.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE December 27, 2001	GROUP 1856

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1	5,536,637	07/16/98	Jacobs			

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES NO

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
✓	2.	Akimaru et al. (1997) Drosophila CBP is a co-activator of cubitus interruptus in hedgehog signalling. Nature. 386:735-738.
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	4.	Alexandre et al. (1996) Transcriptional activation of hedgehog target genes in drosophila is mediated directly by the cubitus interruptus protein, a member of the GLI family of zinc finger DNA-binding proteins. Genes & Development. 10:2003-2013.
	5.	Apelqvist et al. (1997) Sonic hedgehog directs specialised mesoderm differentiation in the intestine and pancreas. Current Biology. 7:801-804.
	6.	Bellusci et al. (1997) Involvement of sonic hedgehog (Shh) in mouse embryonic lung growth and morphogenesis. Development. 124:53-63.
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	8.	Busson et al. (1988) Genetic analysis of viable and lethal fused mutants of drosophila melanogaster. Roux's Arch. Dev. Biol. 197:221-230.
	9.	Chen et al. (1996) Dual roles for patched in sequestering and transducing hedgehog. Cell. 87:553-563.
	10.	Chiang et al. (1996) Cyclopia and defective axial patterning in mice lacking sonic hedgehog gene function. Nature. 383:407-413.
	11.	Chidambaram et al. (1996) Mutations in the human homologue of the Drosophila patched gene in Caucasian and African-American nevus basal cell carcinoma syndrome patients. Cancer Research. 56:4599-4601.
	12.	Dominguez et al. (1996) Sending and receiving the hedgehog signal: control by the drosophila Gli protein cubitus interruptus. Science. 272:1621-1625.
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	15.	Fan and Tessier-Lavigne (1994) Patterning of mammalian somites by surface ectoderm and notochord: evidence for sclerotome induction by a hedgehog homolog. Cell. 79:1175-1186.
	16.	Gailani et al. (1996) The role of the human homologue of drosophila patched in sporadic basal cell carcinomas. Nature Genetics. 14:78-81.
	17.	Grau and Simpson (1987) The segment polarity gene costal-2 in drosophila. Developmental Biology. 122:186-200.
✓	18.	Hahn et al. (1996) Mutations of the human homolog of drosophila patched in the nevus basal cell carcinoma syndrome. Cell. 85:841-851.
	19.	Hooper and Scott (1989) The drosophila patched gene encodes a putative membrane protein required for segmental patterning. Cell. 59:751-765.

EXAMINER	DATE CONSIDERED
	4/1/02

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

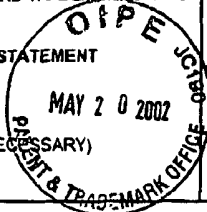
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
N	20. Hynes et al. (1995) Induction of midbrain dopaminergic neurons by sonic hedgehog. <i>Neuron</i> . 15:35-44.
	21. Hynes et al. (1997) Control of cell pattern in the neural tube by the zinc finger transcription factor and oncogene Gli-1. <i>Neuron</i> . 19:15-26.
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	24. Johnson et al. (1994) Ectopic expression of sonic hedgehog alters dorsal-ventral patterning of somites. <i>Cell</i> . 79:1165-1173.
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	26. Klein et al. (1998) Selection for genes encoding secreted proteins and receptors. <i>Proc. Natl. Acad. Sci. USA</i> . 93:7108-7113.
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	34. Nüsslein-Volhard et al. (1984) Mutations affecting the pattern of the larval cuticle in drosophila melanogaster. <i>Roux's Arch. Dev. Biol.</i> 193:267-282.
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	36. Oro et al. (1997) Basal cell carcinomas in mice overexpressing sonic hedgehog. <i>Science</i> . 276:817-821.
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	38. Pham et al. (1995) The suppressor of fused gene encodes a novel PEST protein involved in drosophila segment polarity establishment. <i>Genetics</i> . 140:587-598.
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✓	46. Simpson and Grau (1987) The segment polarity gene costal-2 in drosophila. <i>Developmental Biology</i> . 122:201-209.
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EXAMINER	DATE CONSIDERED
	4/15/04

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
✓	48. Stone et al. (1996) The tumour-suppressor gene patched encodes a candidate receptor for sonic hedgehog. Nature. 384:129-134.
	49. Thérond et al. (1996) Functional domains of fused, a serine-threonine kinase required for signaling in drosophila. Genetics. 142:1181-1198.
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	53. Wicking et al. (1997) Most germ-line mutations in the nevoid basal cell carcinoma syndrome lead to a premature termination of the PATCHED protein, and no genotype-phenotype correlations are evident. Am. J. Hum. Genet. 60:21-28.
✓	54. Xie et al. (1998) Activating smoothed mutations in sporadic basal-cell carcinoma. Nature. 391:80-82.
	55. Database search, Locus list: hum (349, 801 seqs, 66, 964, 548 aa), Mon Jan 7 18:12:49 2002 [BLASTP 2.2.1 [Jul-12-2001], NCBI] 2 pp.
✓	56. Database search, Locus list: hum - est (1, 803, 435 seqs, 6, 559, 376, 613 bp), Tue Jan 8 09:15:52 2002 [BLASTN 2.2.1 [Jul-12-2001], NCBI] 8 pp.

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EXAMINER	<i>m</i>	DATE CONSIDERED	<i>6/15/07</i>
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